



RCRA Facility Investigation Final Report UC Lawrence Berkeley National Laboratory 1 Cyclotron Road Berkeley, California

Fact Sheet

November 2000

INTRODUCTION

The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) is announcing a 45-day public comment period from Nov. 15, 2000 to Dec. 31, 2000, to solicit comments on the Draft Final Resource Conservation and Recovery Act Facility Investigation (RFI) Report for the Ernest Orlando Lawrence Berkeley National Laboratory (LBNL), located at 1 Cyclotron Road, Berkeley, California (see attached General Location Map).

On September 29, 2000, LBNL submitted the draft final RFI report to DTSC. This fact sheet summarizes the results of the RFI conducted at LBNL and the opportunities for public involvement. After review of public comments, DTSC will make a decision on approval of the RFI report.

The Draft Final RFI report documents soil, sediment, air, surface water and groundwater investigations conducted at LBNL from October 1992 to September 2000 (see attached figure for Draft Final RFI Report Study Areas). The RFI Draft Report concludes that of the total of 155 units investigated, only 30 units require further evaluation of remediation alternatives.

Public Comment Period & Workshop

DTSC will hold a 45-day public comment period from Nov. 15, 2000 to Dec. 31, 2000, to solicit comments on the LBNL Draft Final RFI Report. DTSC will also host a workshop to share information on the RFI with the public. Representatives of the San Francisco Bay Regional Water Quality Control Board, City of Berkeley Toxics Management Division, Department of Energy, DTSC and LBNL Environmental Restoration Program will be in attendance.

DTSC RFI Workshop
Dec. 6, 2000 (6:30 PM)
North Berkeley Senior Center
(2nd Floor Conference Rooms A&B)

The LBNL RFI Draft Final Report is available for review at the following locations:

UC Berkeley Doe Library
2nd Floor, Govt and Social Sci. Information
UC Berkeley, CA 94720
(510) 642-2569

LBNL Building 50 Library
1 Cyclotron Road
Berkeley, CA 94720
(510) 486-5621

DTSC Berkeley
700 Heinz Ave, Suite 200
Berkeley, CA 94710
Appointment required: Call 540-3800

DTSC encourages all interested parties to comment or ask questions at the workshop. After review of public comments, DTSC will make a decision on approval of the RFI Report. Please mail comments by December 31, 2000 to:

Waqar Ahmad, Project Manager
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

SITE DESCRIPTION AND BACKGROUND

LBNL is a multipurpose research facility managed by the University of California (UC) for the US Department of Energy (DOE). It is located in the Berkeley/Oakland Hills in Alameda County, California and encompasses approximately 200 acres adjacent to the northeast side of the UC Berkeley campus.

The western three-quarters of LBNL are in the city of Berkeley and the eastern quarter is in the city of Oakland. The site is bordered on the north by single-family residences and on the west by multi-family dwellings, student residence halls, and other campus buildings.

A wide range of research is conducted at LBNL including energy related research in nuclear and high-energy physics; accelerator research and development; materials research; and research in chemistry, geology, molecular biology and biomedical areas.

Many types of chemicals, some of them of a hazardous nature, have been used at LBNL. These include gasoline, diesel, waste oils, polychlorinated biphenyls (PCBs), freon, solvents, metals, acids, caustics, lead and chromate based paints.

RCRA PART B PERMIT

LBNL's Hazardous Waste Handling Facility operates under a Resource Conservation and Recovery Act (RCRA), Hazardous Waste Facility Permit issued by DTSC. California was granted authorization by the U.S. Environmental Protection Agency to implement the RCRA Program in August 1992 as the lead State agency. The Department of Toxic Substances Control has jurisdiction for implementing both RCRA and California's hazardous waste programs. The Permit requires LBNL to investigate and address all historic releases of hazardous waste and constituents that may have occurred at the LBNL (Berkeley/Oakland Hills) site.

Releases that were identified during the RCRA Corrective Action Process are not from LBNL's currently operating and permitted Hazardous Waste Handling Facility. These historic releases are from other operations over the life of this research facility.

RCRA FACILITY ASSESSMENT

Enclosed with this fact sheet is a flow chart that describes the entire RCRA Corrective Action process. In November 1991, DTSC completed a RCRA Facility Assessment (RFA) of the LBNL site. In September 1992, LBNL also prepared an independent RFA to supplement the findings of DTSC. The purpose of the RFA was to identify past and potential releases of hazardous waste and hazardous constituents to the environment from Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) that may require RCRA corrective action. A SWMU is any unit (container, tank, impoundment, etc.) at a facility from which hazardous waste or hazardous constituents might migrate to the surrounding environment. An AOC designates a location where a release has or may have occurred that is not associated with a specific unit.

The RFA involved reviewing facility records, management practices, government agencies files, conducting interviews, visual site inspection, and preliminary sampling. A total of 163 units [88 SWMUs and 75 AOCs] were identified during the RFA and subsequent investigations. Eight of these 163 units were identified as radiological units that are addressed under the authority of the DOE. These radiological units are not included in the scope of this RFI Final Report. The remaining 155 units, which contained or were associated with the release of hazardous constituents (non-radioactive) only, are addressed under the lead regulatory authority of the DTSC, with certain oversight responsibilities delegated to the San Francisco Bay Regional Water

Quality Control Board and the City of Berkeley.

Based upon the findings of the RFA, DTSC concluded that further corrective action was necessary to characterize contamination at the site and required LBNL to conduct a RFI.

RCRA FACILITY INVESTIGATION

The objectives for the RFI were to define the source, nature, and extent of contamination identified in the RFA and subsequent investigations.

Due to the large size of the LBNL site and complexity of the investigations to be conducted, characterization was divided into three work phases. LBNL submitted RFI workplans for phases I, II, and III in November 1992, October 1994, and October 1995, respectively. LBNL also submitted numerous supplemental documents to address investigation and characterization activities at the SWMUs and AOCs.

LBNL conducted the following investigation activities and associated laboratory analysis in conformance with RFI workplans:

- collection of soil samples from drilled soil borings;
- collection of soil gas samples from installed soil gas probes;
- collection of water samples from installed lysimeters;
- collection of groundwater samples from existing hydraugers and installed monitoring wells;
- collection of surface water and sediment samples;
- collection of indoor and outdoor air samples.

DTSC has determined that no additional action is warranted in areas where constituents were found in soil at concentrations that are below the California Modified Preliminary Remediation Goals (PRGs), or United States Environmental

Protection Agency PRGs, when applicable, or below LBNL background concentrations for metals. PRGs are health-based soil cleanup levels that were derived assuming generic exposure pathways via ingestion, inhalation, and dermal contact.

INTERIM CORRECTIVE MEASURES

Throughout the RFI phase of the RCRA Corrective Action Process, LBNL has implemented interim corrective measures in consultation with regulators for several buildings with sumps, underground tanks, and solvent contaminated plumes.

These measures included:

- removing sources of contamination;
- stopping discharge of contaminated groundwater to surface waters;
- eliminating potential pathways that could contaminate groundwater;
- preventing further migration of contaminated groundwater.

RFI FINDINGS:

The Draft RFI report concludes that out of the 155 units identified in the RFA and subsequent investigations, 30 units require further evaluation of remediation alternatives. These units will be addressed during the Corrective Measures Study (CMS) phase of the RCRA Corrective Action Process.

FUTURE ACTIONS

The future corrective action activities to be conducted by LBNL will include:

- conducting a CMS as part of the RCRA Corrective Action Process to evaluate alternatives for remediation of areas of impacted soil and/or groundwater;

- submittal of a CMS Report to DTSC for review and approval upon completion of the study.

Based on the findings of the CMS Report, DTSC will propose a Notice of Remedy Selection that will include public participation and comments.

FOR ADDITIONAL INFORMATION

DTSC will continue to keep interested persons informed by fact sheets, telephone, and other means, as information becomes available. Additionally, periodic updates on LBNL's Environmental Restoration Program have been made at the City of Berkeley's Community Environmental Advisory Committee Meetings for the past several years.

If you have any questions or concerns please contact the following DTSC staff:

Roman Racca
Public Participation Specialist
DTSC
301 Capitol Mall
Mail P.O. Box 806
Sacramento, CA 95812-0806
(916) 445-9543

Or

Waqar Ahmad
Project Manager
DTSC
700 Heinz Avenue, Suite 200
Berkeley, CA 94710-2737
(510) 540-3932

MAILING LIST

If you didn't receive this fact sheet directly in the mail and want to receive future fact sheets on UC Lawrence Berkeley National Laboratory site, please complete and mail this form to:

Roman Racca
California Environmental Protection Agency
Department of Toxic Substances Control
P.O. Box 806
Sacramento, CA 95812-0806

Name: _____

Address: _____

City: _____ State: _____ ZipCode: _____

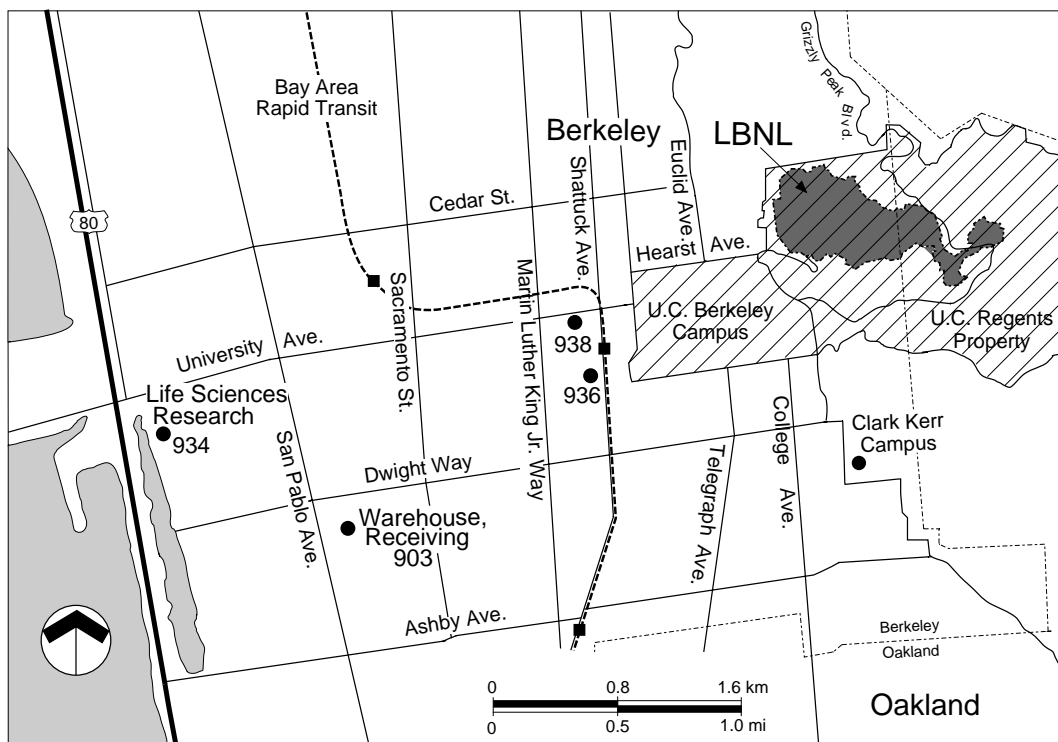
NOTICE TO HEARING IMPAIRED

TDD users can obtain additional information by using the California State Relay Service (1-888-877-5378) to reach Roman Racca at (916) 445-9543.

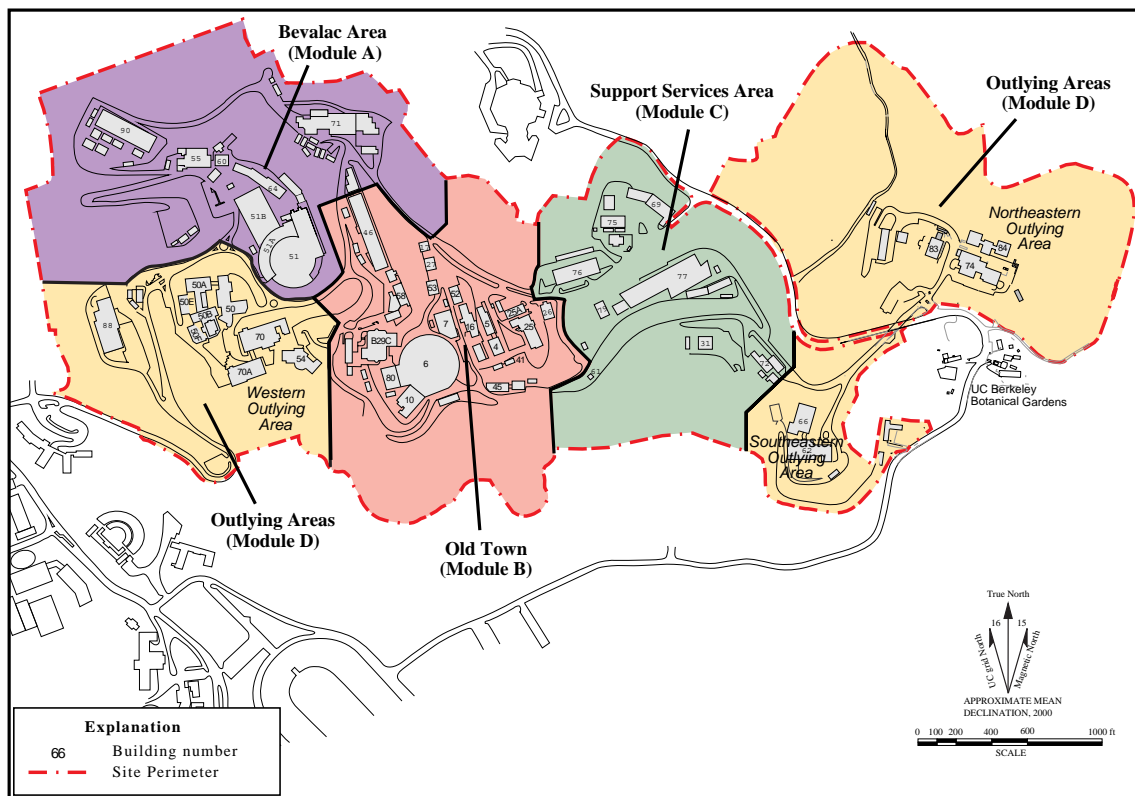
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General Location Map



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Draft Final RFI Report Study Areas (Four Modules)

Corrective Action Process

